

# J.W. Dalton Well Plugging – 2005

## Operations Summary

BLM initiated well plugging operations began in the J.W. Dalton area on April 12, 2005 under contract to Marsh Creek. The following legacy well was plugged before the cessation of operations on April 24, 2005:

- **J.W. Dalton Test Well #1**

Plugging operations were conducted to prevent coastal erosion from damaging and engulfing the well casing of the J.W. Dalton well which was found to be exposed to wave action just prior to freeze up in September 2004. The well was drilled in 1979 as part of the USGS exploration efforts in the National Petroleum Reserve - Alaska. The USGS had been actively using the well for permafrost temperature measurements prior to 2004. Diesel inside the wellbore had been used as a non-freezing medium to aid in conducting the temperature measurements. During well plugging operations, approximately 10,000 gallons of diesel was displaced with salt-saturated sea water prior to running a cement plug. The well was originally located 1500 feet inland from the Beaufort Sea coast and is approximately 120 miles northwest of Prudhoe Bay.



Figure 1 – Map of J.W. Dalton well location



**Figure 2 – J.W. Dalton wellhead during the summer of 2000.**



**Figure 3 – J.W. Dalton wellhead during the summer of 2004.**



**Figure 4 – Sleigh Camp used for J.W. Dalton operations April 14, 2004**





**Figure 5 – Excavation of the well cellar**



**Figure 6 – Removal of the abandonment marker**



**Figure 7 – Setup for diesel displacement operations**



**Figure 8 – Plug setting operations using jointed tubing**





**Figure 9 – Excavation of well casing prior to removal**



**Figure 10 – Well casings cut-off below mudline**



